Marine Life Protection Act Initiative

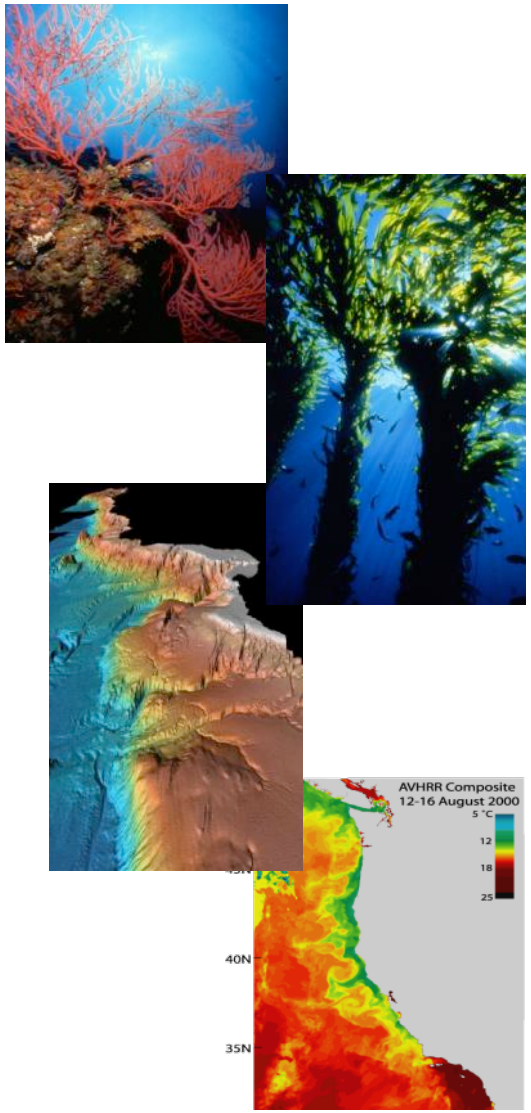
SAT Evaluations of IPA Proposal
North Central Coast Study Region

Presentation to the MLPA Science Advisory Team

May 30, 2008 Presented by Dr. Steve Gaines

MLPA Goals: Populations

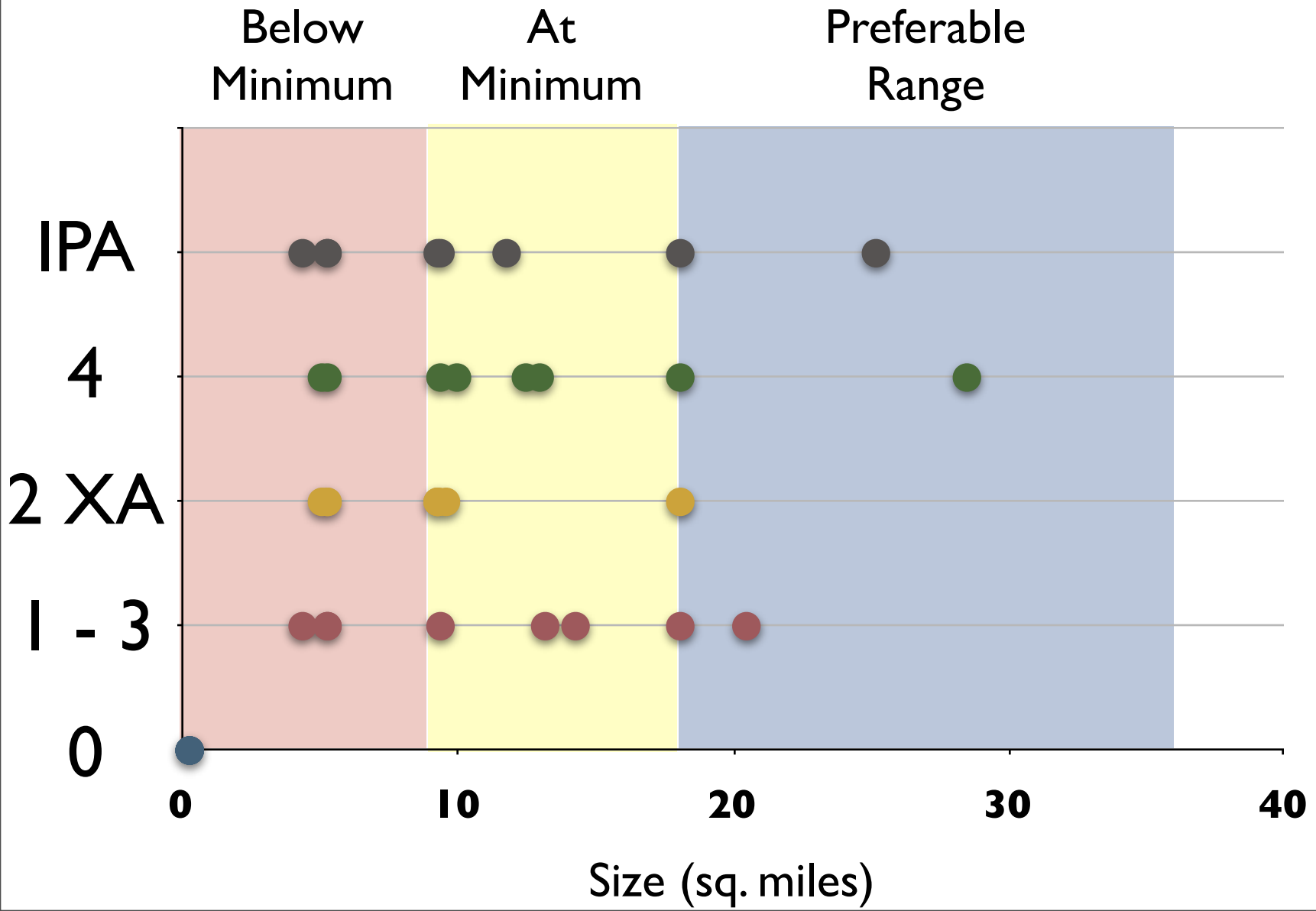
1. To protect the natural diversity and function of **marine ecosystems**.
2. To help sustain and restore **marine life populations**.
3. To improve **recreational, educational, and study opportunities** in areas with minimal human disturbance.
4. To protect representative and unique **marine life habitats**.
5. Clear objectives, effective management, adequate enforcement, sound science.
6. To ensure that MPAs are designed and managed as **a network**.



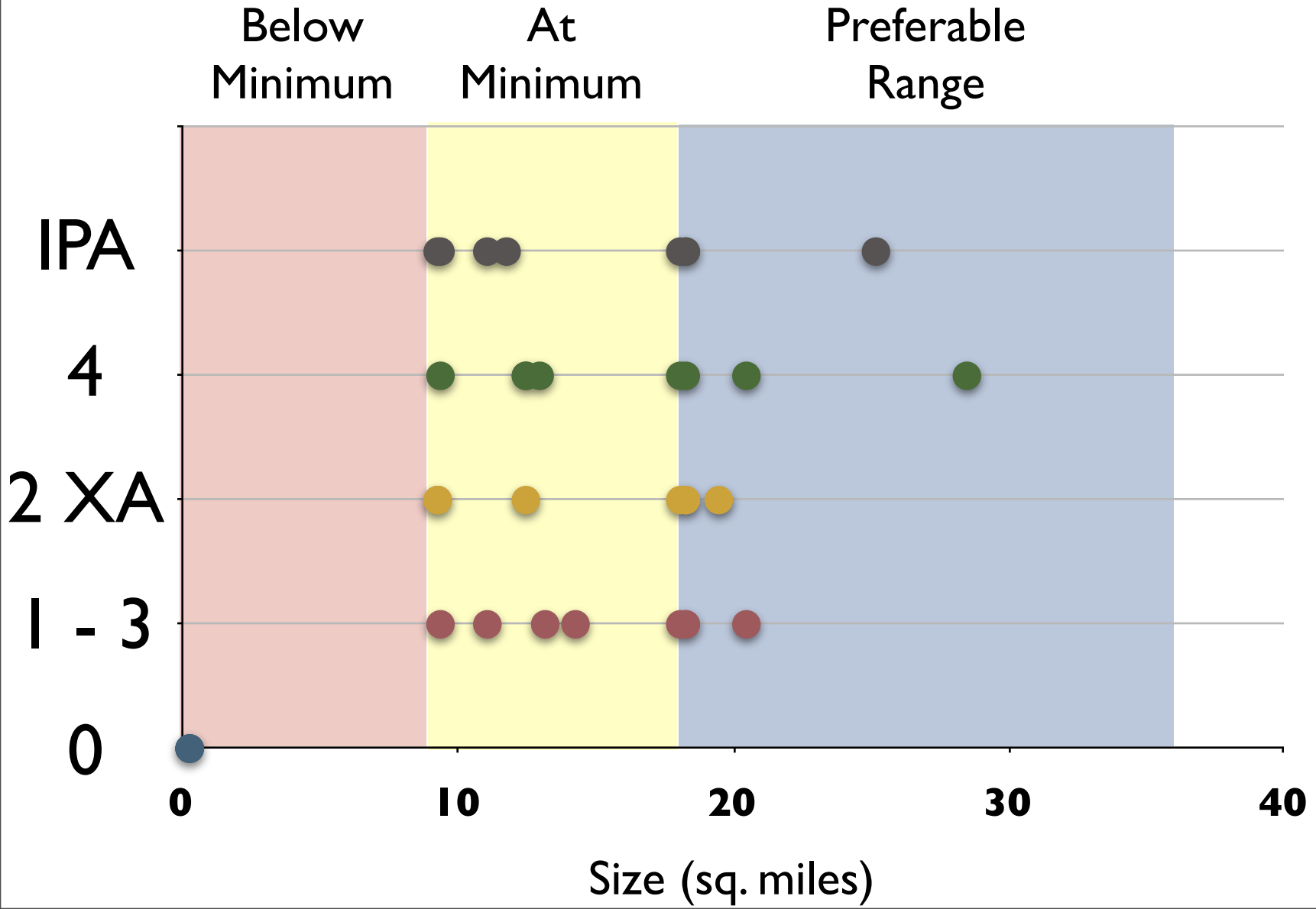
Size Analysis Methods

- Measure individual MPA lengths and area
- Combine contiguous MPAs into single MPA complexes
- Consider level of protection
- Tabulate MPA lengths and areas relative to minimum & preferred guidelines

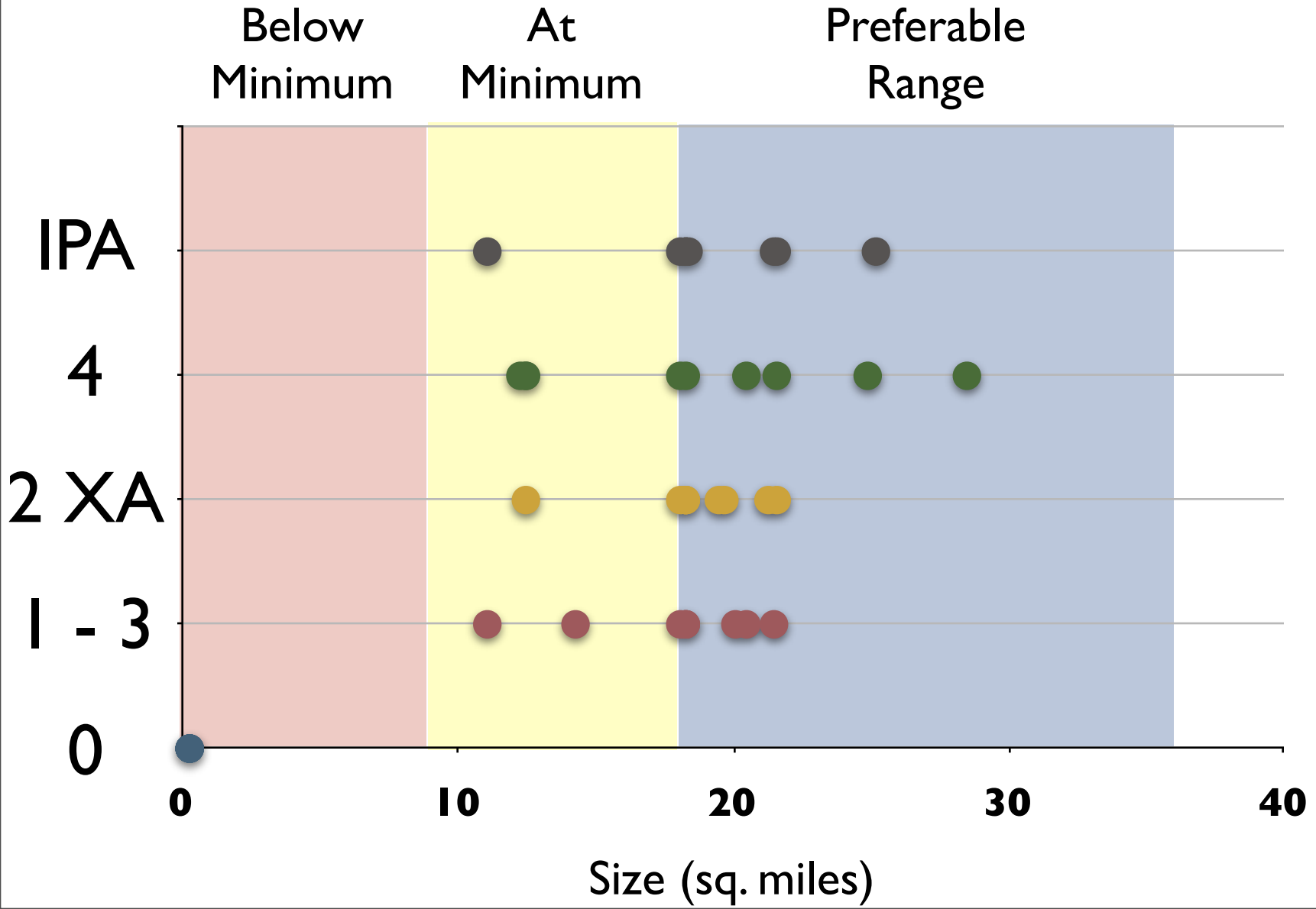
MPA Cluster Sizes
(Very High Protection)



MPA Cluster Sizes
(High Protection)



MPA Cluster Sizes
(Moderately High Protection)



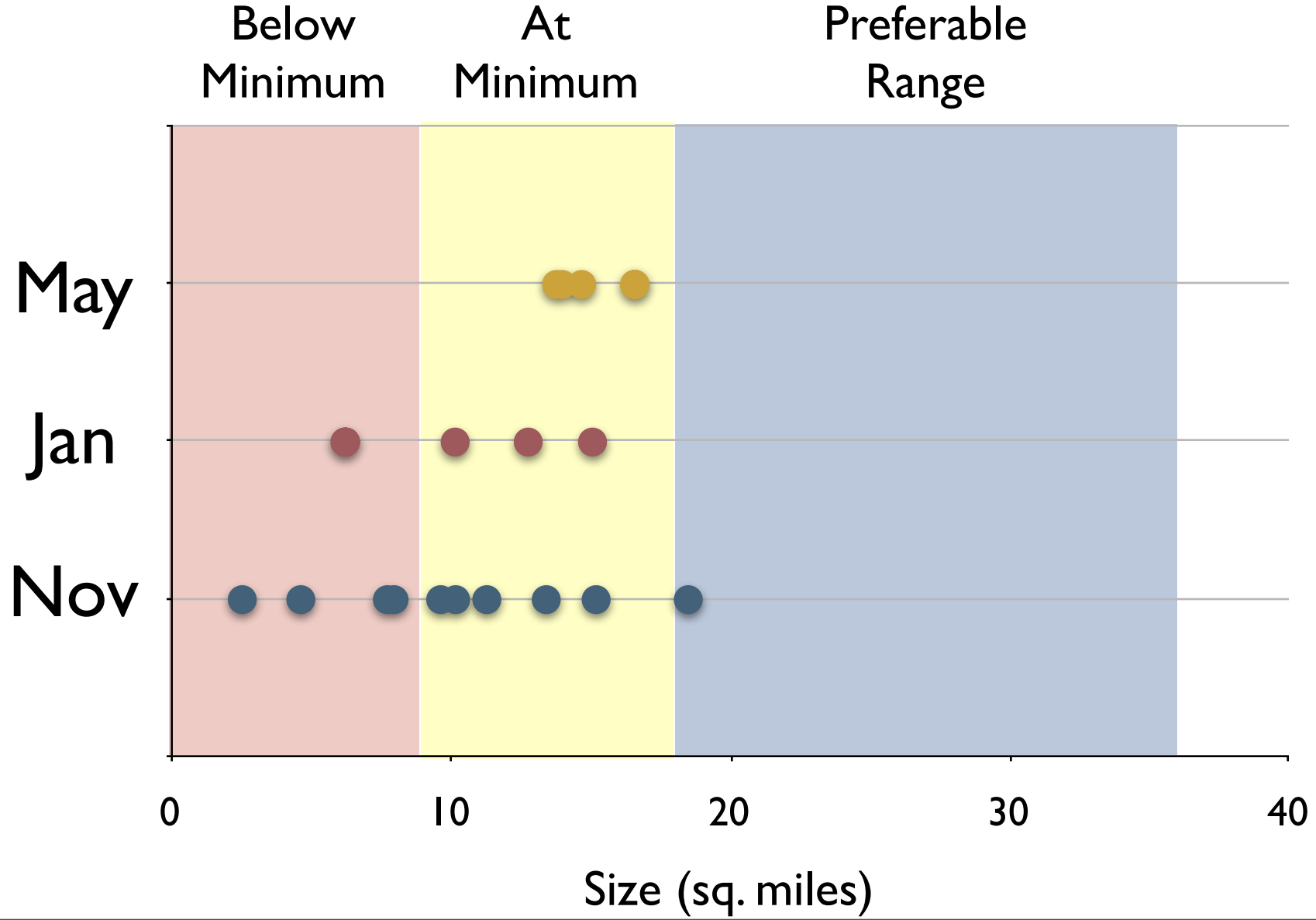
MPA Size Conclusions

- Most MPAs meet minimum size guideline
- All MPAs meet minimum size for High/Mod High Protection in all proposals

Avg MPA Size	Very High Protection	High Protection	Mod High Protection
1 - 3	12.2	14	17.7
2 XA	9.4	13.8	18.8
4	12.7	16.6	18.8*
IPA	11.9	14.7	19.2

*Proposal 4 has two more MPA Clusters than other Proposals

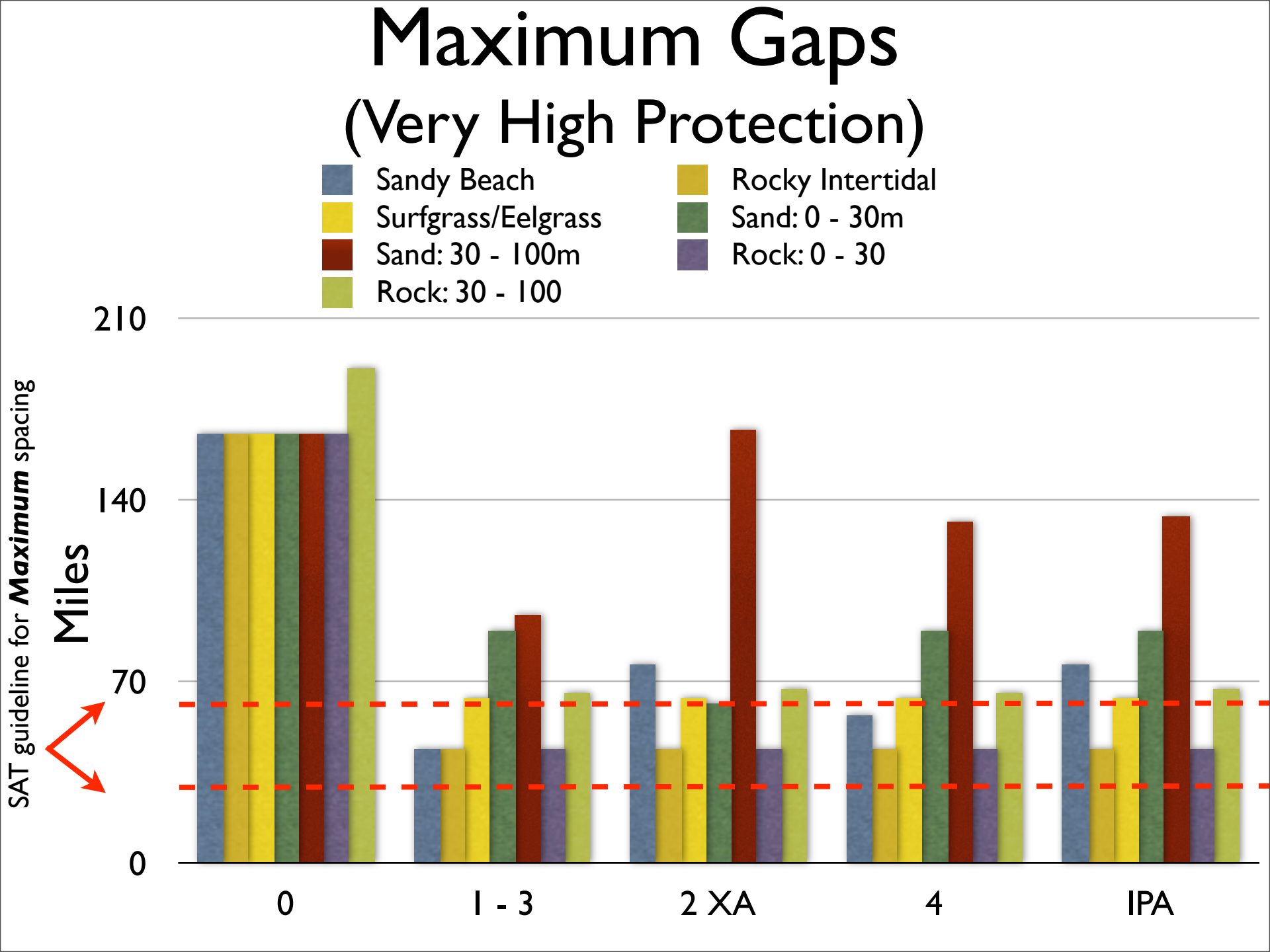
Average MPA Cluster Sizes (High Protection)



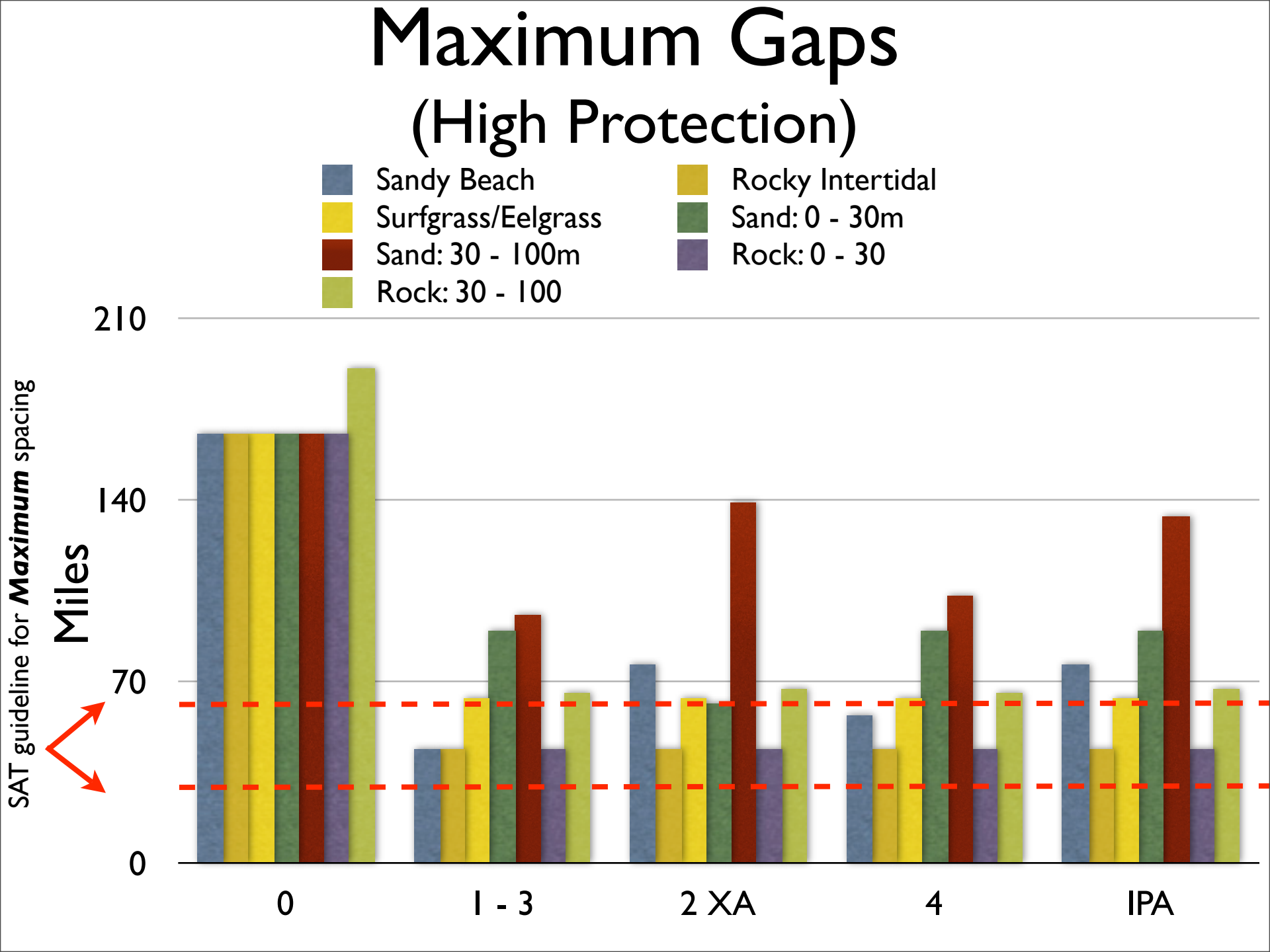
Spacing Analysis Methods

- MPAs must meet the minimum size guidelines (9 sq mi)
- Characterize each MPA by the habitats included
- For each habitat, measure the gaps between adjacent MPAs

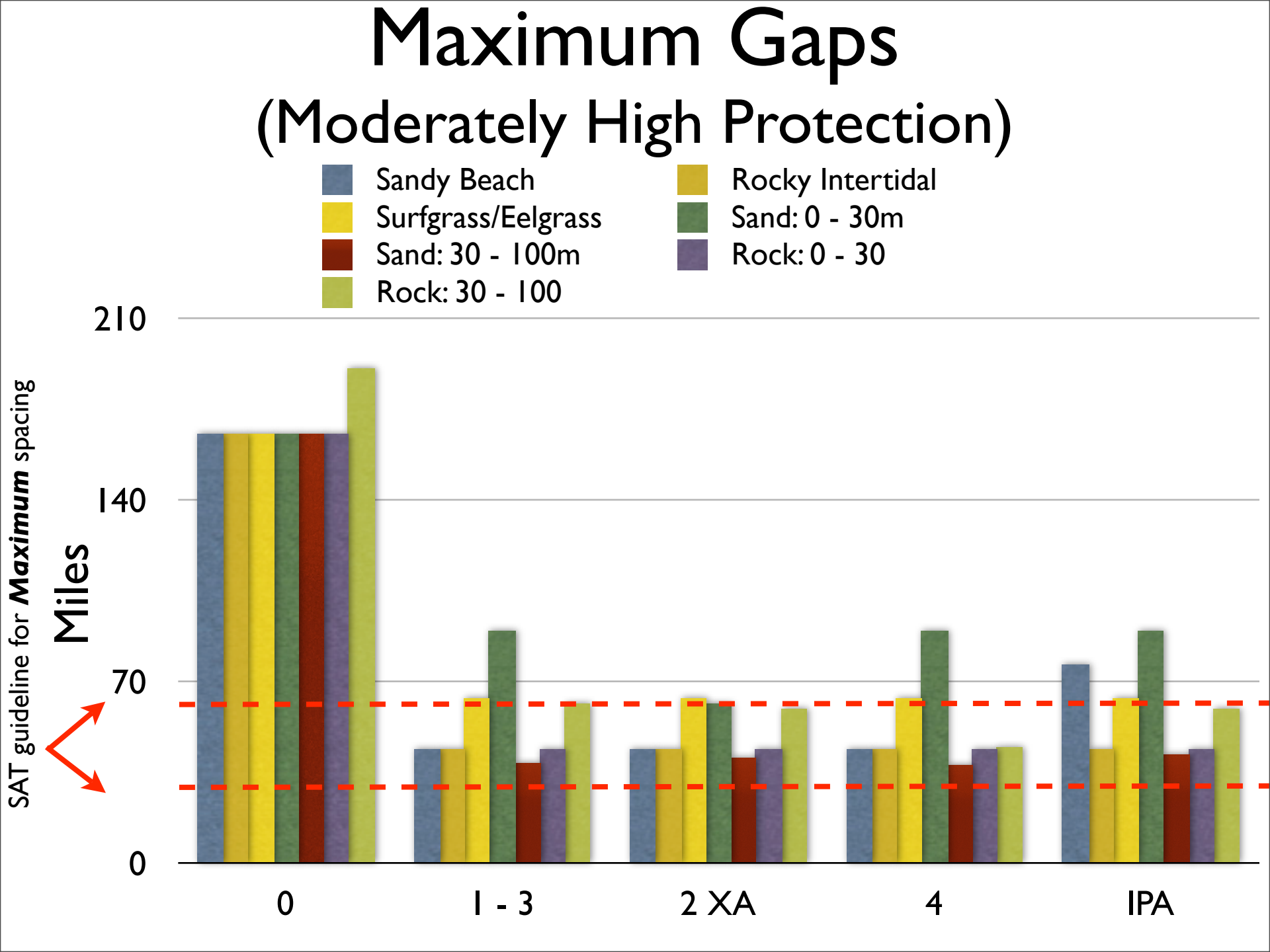
Maximum Gaps
(Very High Protection)



Maximum Gaps
(High Protection)



Maximum Gaps
(Moderately High Protection)



MPA Spacing Conclusions

- All Proposals have gaps that exceed guidelines for two or three habitats at Very High and High Levels of Protection
- Large gaps are all in sandy habitats
- Proposal 2 XA meets guidelines for Moderately High Protection
- Proposals 1 - 3 and 4 have a single gap (Shallow Sand) that exceeds guidelines for Moderately High Protection
- Proposal IPA has two gaps (Shallow Sand & Sandy Beach) that exceed guidelines for Moderately HIgh Protection

SAT Preliminary Evaluations